

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Previously presented) A drilling tool for machine tools, having a drill bit body and at least two inserts which are arranged at a radial distance from one another in insert seats of the drill bit body in a region of respective chip flutes, the inserts project with their front-end main cutting edges axially beyond the drill bit body and radially overlap one another in their active regions, a radially outer insert of said at least two inserts has an outer insert corner and an adjoining secondary cutting edge projecting beyond the drill bit body, and the secondary cutting edge, starting from the insert corner, being inclined at a defined setting angle (α_a) in its longitudinal extent in the direction of the drill bit body, wherein the front-end main cutting edge of the outer insert is subdivided in its longitudinal extent into a radially inner working section and a peeling section adjoining said working section on the outside and extending up to the outer insert corner, said working and peeling sections enclosing an angle of 95° to 110° with one another.

2. (Previously presented) The drilling tool as claimed in claim 1, wherein the working section of the main cutting edge, toward the peeling section is set at a positive setting angle of 2° to 10° relative to an end face of the drill bit body.

3. (Previously presented) The drilling tool as claimed in claim 1, wherein the peeling section of the main cutting edge, toward the outer insert corner, is set at a positive setting angle of 72° to 87° relative to an end face of the drill bit body.

4. (Previously presented) The drilling tool as claimed in claim 1, wherein a transition point between the working section and the peeling section of the main cutting edge is rounded off convexly.

5. (Previously presented) The drilling tool as claimed in claim 1, wherein in the region of the outer insert corner, the peeling section of the main cutting edge and the adjacent secondary cutting edge enclose an angle of 160° to 175° with one another.

6. (Previously presented) The drilling tool as claimed in claim 1, wherein a central section extending up to an inner insert corner adjoins the working section of the front-end main cutting edge radially on the inside, the central section enclosing a sweepback angle of 160° to 175° with the working section and being set at a negative setting angle of 3° to 18° relative to the end face of the drill bit body.

7. (Previously presented) The solid drill bit as claimed in claim 6, wherein the active region of the central section of the front-end main cutting edge of the outer insert is overlapped by the front-end main cutting edge of the inner insert and is rendered ineffective.

8. (Previously presented) The solid drill as claimed in claim 1, wherein the inserts comprise indexable inserts having four main cutting edges of the same length.

9-14. (Cancelled)

15. (Currently amended) A drilling tool for machine tools comprising:

a drill bit body having at least two insert seats and chip flutes opening axially at an end face thereof;

an inner insert mounted in one of said insert seats and having a front-end main cutting edge projecting axially beyond the end face of the drill bit body; and

a radially outer insert mounted in another one of said insert seats and having a front-end main cutting edge projecting axially beyond the end face of the drill bit body and an adjoining secondary cutting edge projecting radially outwardly beyond the drill bit body, the front-end main cutting edge and the secondary cutting edge meeting at an outer insert corner of said outer insert, the secondary cutting edge starting from the insert corner being inclined at a defined setting angle (α_a) along the length thereof, and to permit burr-free through drilling the front-end main cutting edge of the outer insert is subdivided along the length thereof into a radially inner working section and a peeling section, the peeling section adjoining the working section and extending radially outwardly to the outer insert corner, wherein the inner working section and the peeling section enclose an angle of 95 degrees to 110 degrees.

16. (Cancelled)

17. (Currently amended) The drilling tool of claim ~~16~~15, wherein the working section of the main cutting edge toward the peeling section is set at a positive setting angle of 2 degrees to 10 degrees relative to the end face of the drill bit body.

18. (Currently amended) The drilling tool of claim ~~16~~15, wherein the peeling section toward the outer insert corner is set at a positive setting angle of 72 degrees to 87 degrees relative to the end face of the drill bit body.

19. (Currently amended) The drilling tool of claim ~~16~~15, wherein a transition point between the working section and the peeling section of the outer insert is rounded off convexly.

20. (Currently amended) The drilling tool of claim ~~16~~15, the outer insert including a central section adjoining the working section and extending radially inwardly to an inner insert corner, the central section enclosing a sweepback angle of 160 degrees to 175 degrees with the working section and being set at a negative setting angle of 3 degrees to 18 degrees relative to the end face of the drill bit body.

21. (New) An outer insert for a drilling tool which can be used in a machine tool, having at least one main cutting edge, extending between a first and a second insert corner, and an adjacent secondary cutting edge adjoining the first insert corner, wherein the main cutting edge is subdivided in its longitudinal extent into a rectilinear working section and an adjoining rectilinear peeling section extending up to the first insert corner, said sections enclosing an angle of $90^\circ + \delta$ with one another, wherein in a region of the first insert corner, the peeling section of the main cutting edge and the adjacent secondary cutting edge enclose an angle of $180^\circ - \delta$ with one another, wherein a central section extending up to the second insert corner adjoins the rectilinear working section of the main cutting edge, the central section enclosing a sweepback angle of $180^\circ - \delta$ with the working section, wherein δ is in the range of 5° to 20° , and wherein the outer insert comprises an indexable insert having third and fourth insert corners and four identical ones of said main cutting edges which are offset from adjacent ones of said main cutting edges by 90° and wherein in use a relevant said main cutting edge adjoining a relevant said corresponding insert corner performs the function of the secondary cutting edge with regard to another relevant said main cutting edge that functions as the main cutting edge.

22. (New) The outer insert as claimed in Claim 21, wherein a transition point between the working section and the peeling section of each of the main cutting edges is rounded off convexly.

23. (New) The outer insert of Claim 21, wherein the peeling section toward the outer insert corner is set at a position setting angle of 72° to 87° relative to an end face when the outer insert is secured to a drill bit body.